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Amendments To The Specification

Ormiston & McKinney

1. Please substitute the following amended paragraph for the original paragraph beginning on page 1, line 12.

To optimize print quality, an imaging device generally requires a number of parameters such as print modes, color maps, and/or the like, to be configured. This is because such parameters typically vary with the type of media being utilized. For example, an ink-based imaging device such as an ink jet printer that prints to an overhead transparency (OHT) designed for a laser printer may result in a print that not only may need to be re-imaged, but that also may result in gumming-up the internal assembly of the imaging device. This is because ink-based imaging devices use ink and laser-based OHTs do not generally have any ink retention coating. Accordingly, an ink-imaging device may adjust parameters such as printing speed, ink drying time, the amount of ink used, and/or the like, to suit the particular print media being used.

2. Please substitute the following amended paragraph for the original paragraph beginning on page 2, line 15.

Accordingly, a number of conventional techniques have been developed for an imaging device to identify the particular type of print media that is loaded into an imaging device. For example, U.S. Pat. No. 6,148,162 7,148,162 to Huston et al., assigned to the assignee hereof, and incorporated herein by reference, describes marking each sheet of print media with eight (8) separate indicia by imprinting the markings either on the face of each media sheet or on the side of each media sheet. I.e., two (2) barcodes are printed for detection either from each margin (top, right, bottom, and left) of the face of the print media or printed for detection from each edge (top, right, bottom, and left) of the print media. Such a conventional procedure to provide print media parameters to a printer has a number of disadvantages.

3. Please substitute the following amended paragraph for the original paragraph beginning on page 5, line 7.

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FIG. 1 shows an exemplary sheet of print media having an ink-bled media marking (e.g., a barcode) imprinted thereon. The "ink" aspect of an ink-bled marking indicates only that it is a fluid-based marking that can be detected by a sensor coupled to an imaging device (e.g., the sensor 716 of the imaging device 612 of FIG. 7 [[6]]). The fluid-based marking is produced using any of a number of different fluids besides colored ink (e.g., non-visible ink, non-visible fluorescing ink, etc). In this configuration the ink-based marking is produced using non-visible fluorescing inkFIG. 1 shows an exemplary sheet of print media having an ink-bled media marking (e.g., a barcode) imprinted thereon. The "ink" aspect of an ink-bled marking indicates only that it is a fluid-based marking that can be detected by a sensor coupled to an imaging device (e.g., the sensor 716 of the imaging device 612 of FIG. 6). The fluid-based marking is produced using any of number of different fluids besides colored ink (e.g., non-visible ink, non-visible fluorescing ink, etc). In this configuration the ink-based marking is produced using non-visible fluorescing ink.

4. Please substitute the following amended paragraph for the original paragraph beginning on page 5, line 25.

FIG. 2 shows further aspects of an exemplary sheet of print media 100 of FIG. 1 having an ink-bled media marking 102 imprinted thereon. Specifically, FIG. 2 enlarges the ink-bled media marking of FIG. 1 to illustrate that the ink-bled media marking <u>is</u> in imprinted both on an edge 104 of the sheet of print media as well as bled onto the face 106 of the print media. The ink that has bled onto the face of the print media is shown in the shaded portion of 106 that intersects with the dotted line that circumscribes the marking 102.

- 5. Please substitute the following amended paragraph for the original paragraph beginning on page 6, line 6.
 - FIG. 3 is a block diagram that shows an exemplary system 300 to imprint ink-

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bled media markings 102 of FIGS. 1 and 2 onto a stack of print media 302 that includes respective sheets of print media 100 with a sufficient ink-wicking property. A sheet of print media is in a stack such as a ream of print media just prior to being packaged. An ink nozzle 304 302 of a printing system directs an ink spray 306 using a mask such as a barcode mask (not shown) onto the respective exposed edges of each sheet in the ream. This technique forms exemplary ink-bled media markings 102 not only on the sprayed edges of the print media, but also on the faces 106 of the print media. Other methods besides spraying ink can be used to imprint the ink-bled markings onto the edges of the print media such as stamping the markings onto the edge of the ream, etc.

6. Please substitute the following amended paragraph for the original paragraph beginning on page 6, line 7.

FIG. 4 is a block diagram that shows an exemplary system 400 to imprint ink-bled media markings 102 of FIG. 1 onto a stack of print media 100 that includes respective sheets of print media with low ink-wicking properties. For specialty print media 100 that do not have sufficient ink-wicking properties to carry imprinted ink from the edge of the print media to the face of the print media, the media stack 302 is skewed at an angle (see, angle 502 of FIG. 5) to expose a respective facial-portion (e.g., face portion 410 310) on each sheet in the stack. The angle of the skew determines how far into a sheet of print media that the "bleed" marking will extend after being imprinted with the ink-bled media marking.

7. Please substitute the following amended paragraph for the original paragraph beginning on page 10, line 1.

In this example, each sheet of print media 100 that is loaded into a media bin 622 includes media parameter information on an ink-bled marking (e.g., the ink-bled marking marking 102 of FIGS. 1 and 2). The print media shown in the output bin 624 has already presented the imaging device with a number of media parameters in respective ink-bled media markings to configure the device's imaging operations. An

S/N:09/981,275 Case: 10013717-1 Response to Office Action exemplary procedure for an imaging device to sense and configure its operating parameters based on media parameter information provided by ink-bled media markings is described in greater detail below in reference to FIG. 9.[[)]]

8. Please substitute the following amended paragraph for the original paragraph beginning on page 10, line 20.

In the depicted arrangement, the device 612 includes a plurality of media supplies 622. A first and second media supply 622-1 and 622-2 include respective stacks 302, or reams of print media. Each sheet 100 in the stack has at least one inkbled media marking (e.g., the marking 102 of FIGS. 1 and 2) imprinted on at least one edge and at least one facial portion of the sheet. The facial portion is adjacently positioned and corresponds to the marking that is imprinted on the edge. Each respective marking has data thereon that is used by the device 612 to configure itself to form images upon the print media. The data read from an ink-bled marking as a sheet is picked from the stack and read by a sensor 716 that is described in further detail below.

9. Please substitute the following amended paragraph for the original paragraph beginning on page 11, line 24.

If a sensor (e.g., sensors 716-1, 716-2, 716-3, and/or 716-5) is positioned to read ink-bled marked indicia from the sheet of print media before the sheet 100 has been committed to the paper path 712, the imaging device 612 <u>provides</u> provide the information that is in the marked indicia (e.g., paper sizes and types like glossy paper, transparencies, etc.) to a user. Moreover, if the sensor is positioned to detect the marked indicia from the sheet of print media before the sheet has been committed to the paper path, the imaging device can use the detected information to determine an appropriate media supply bin from which to pull the print media sheet to be imaged upon.

10. Please substitute the following amended paragraph for the original paragraph beginning on page 13, line 14.

Storage circuitry 910 is configured to store electrical information such as image data 920 for using and formulating hard images and instructions 915 usable by control circuitry 914 for implementing image-forming operations within device 612 of FIGS. 6 and 7. Exemplary storage circuitry includes nonvolatile memory (e.g., flash memory, EEPROM, and/or read-only memory (ROM)), random access memory (RAM), and hard disk and associated drive circuitry.

11. Please substitute the following amended paragraph for the original paragraph beginning on page 14, line 3.

An exemplary configuration of control circuitry 914 is implemented as a processor such as a dedicated microprocessor configured to fetch and execute computer-executable instructions 915 948 that are stored in storage circuitry 910. The control circuitry is also configured to fetch data 920 from the storage circuitry during the execution of the computer-executable instructions. The computer-executable instructions configure the image-forming device 612 according to the type of print media 100 being imaged upon.

12. Please substitute the following amended paragraph for the original paragraph beginning on page 14, line 10.

For example, different types of media 100 of FIG. 1 have various weights, surface finishes, roughness, wicking properties, etc., which impact equality of images formed thereupon. The imaging parameters of device 612 including those of image engine 718 are adjusted by the control circuitry 914 in conjunction with the computer-executable instructions 915 918 to optimize the formation of quality images upon media 100 responsive to the types of media utilized as indicated by the ink-bled data (e.g., ink-bled marking 102 of FIGS. 1 and 2) imprinted on a media sheet 100.

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Please substitute the following amended paragraph for the original paragraph 13. beginning on page 15, line 4.

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FIG. 10 is a flowchart that shows an exemplary procedure 1000 to optimize imaging device operations based on detecting at least one ink-bled media marking (e.g., markings 102 of FIGS, 1 and 2) that is imprinted on a sheet of print media 100. At block 1002, an imaging device (e.g., device 612 of FIGS. 6, 7 and 9) detects information from an ink-bled media marking that is imprinted on an edge of a sheet of print media. At block 1004 4042, the imaging device uses the detected information to configure image-forming operations to form an image on the sheet of print media 100.